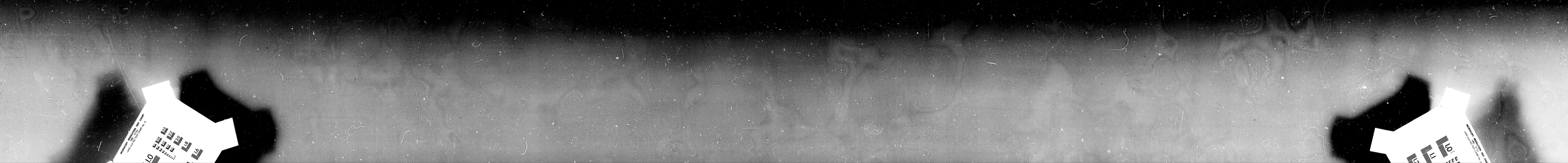


I49.89.82/47-1/map C 2

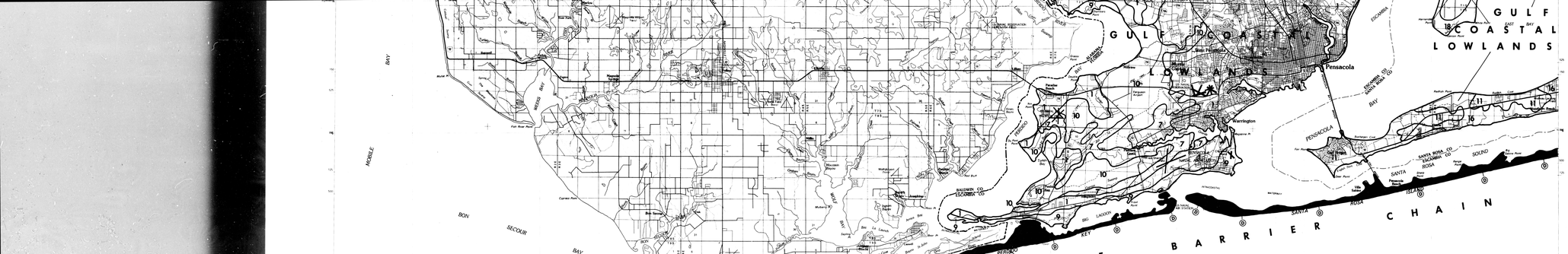
MMS 85-0011
FWS/OBS-82/47.1

MAP C2

Pensacola

FLORIDA ECOLOGICAL ATLAS

SOILS AND LANDFORMS



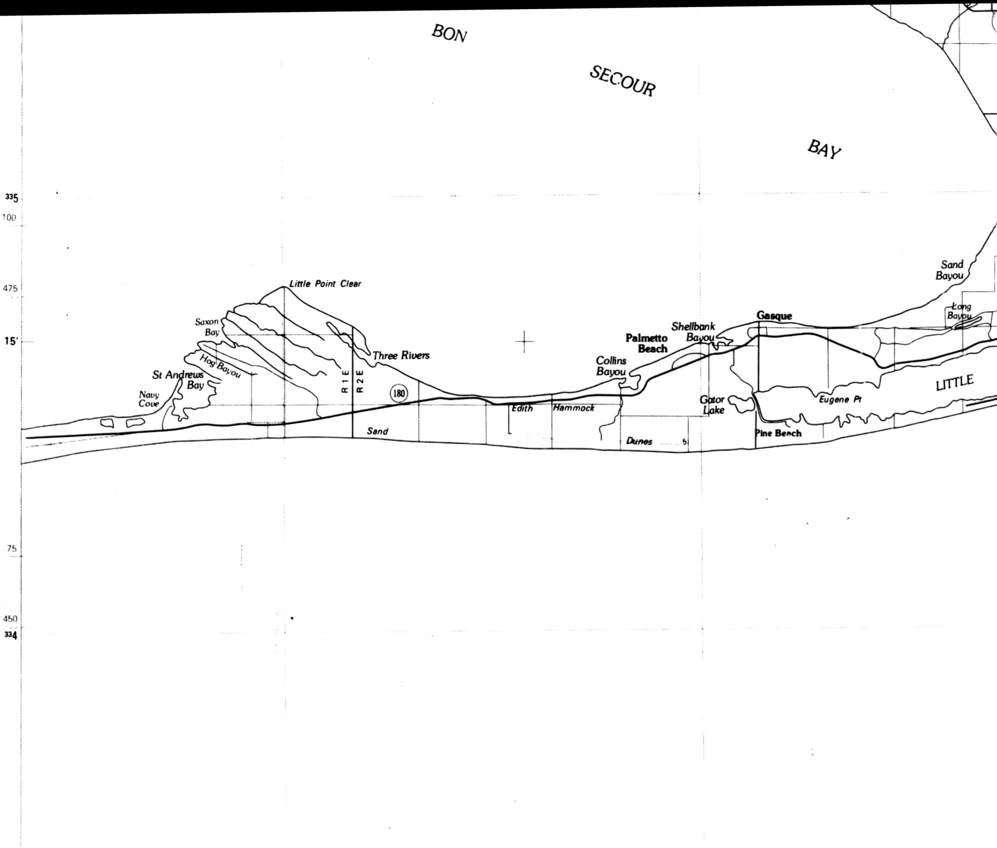
TOPICAL MAPS IN THIS ATLAS:

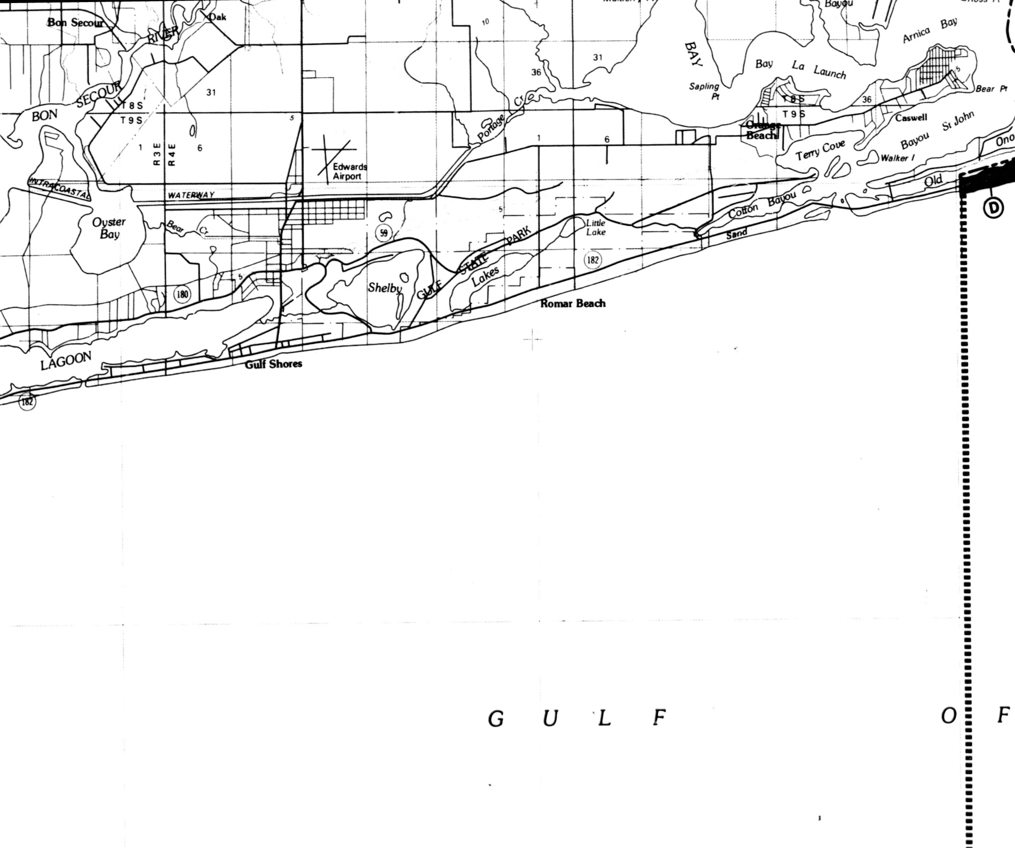
A. BIOLOGICAL RESOURCES
B. SOCIOECONOMIC FEATURES
C. SOILS AND LANDFORMS
D. OIL, GAS AND MINERALS
E. HYDROLOGY AND CLIMATOLOGY

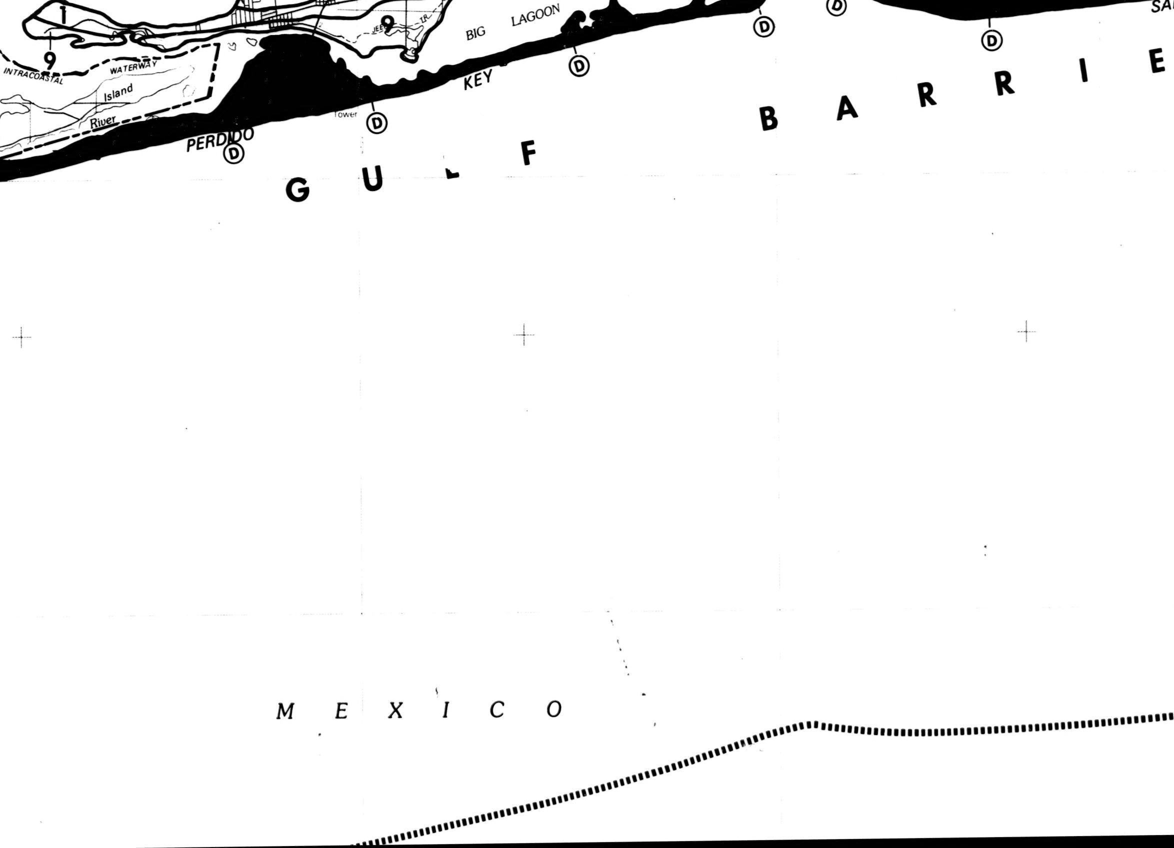
1984

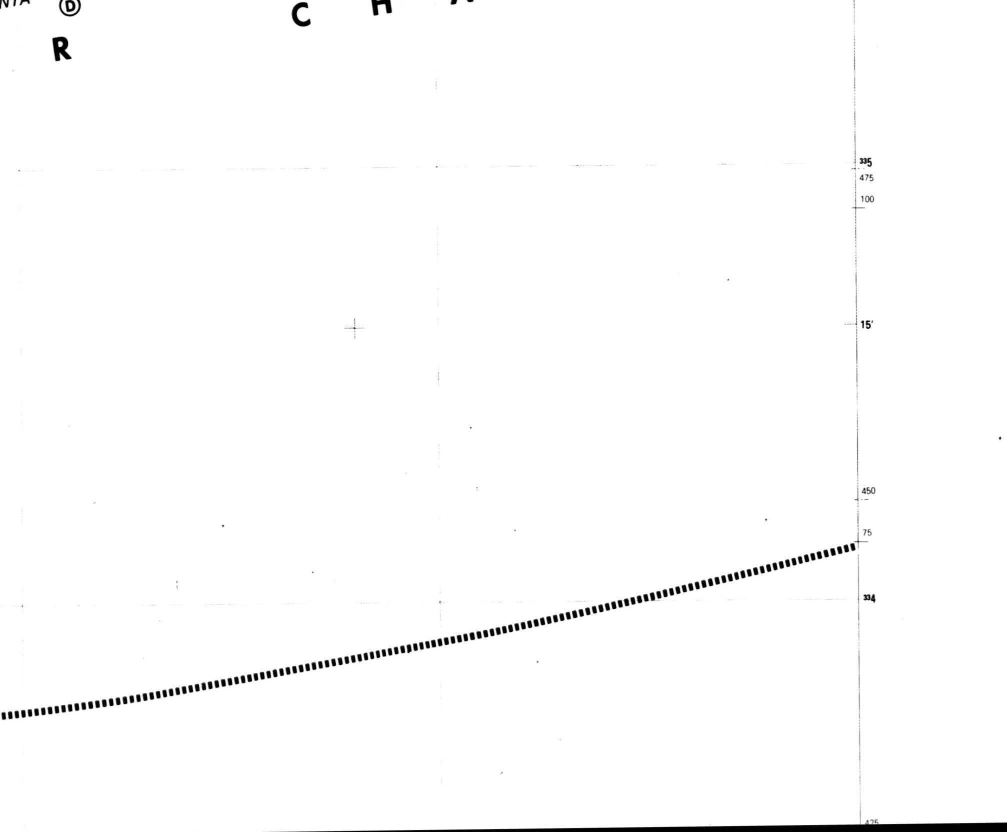
Produced by U.S. Fish and Wildlife Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17, Universal Transverse Mercator
10,000-foot grid ticks based on Florida coordinate


BON
SECOUR
BAY
335
100
475
15′
75
450
334
Little Point Clear
Saxon Bay
Hog Bayou
St Andrews Bay
Navy Cove
Three Rivers
R 1 E
R 2 E
180
Sand
Edith
Hammock
Dunes
Collins Bayou
Palmetto Beach
Shellbank Bayou
Gasque
Gator Lake
Pine Beach
Eugene Pt
Sand Bayou
Long Bayou
LITTLE


Bon Secour
Oak
RIVER
SECOUR
BON
T 8 S
T 9 S
R 3 E
R 4 E
1
6
31
5
10
36
31
BAY
Sapling Pt
Bayou
Bay La Launch
Arnica Bay
Bear Pt
T 8 S
T 9 S
36
5
Caswell
Orange Beach
Terry Cove
Bayou St John
Walker I
Ono
Old
D
Portage Cr
1
6
Edwards Airport
INTRACOASTAL
WATERWAY
Oyster Bay
Bear Cr
59
5
Little Lake
Cotton Bayou
Sand
182
Shelby
GULF STATE PARK
Lakes
180
5
Romar Beach
LAGOON
Gulf Shores
182
G U L F
O F


1
9
9
INTRACOASTAL
WATERWAY
Island
River
PERDIDO
Tower
KEY
BIG
LAGOON
JEEP TR.
SA
D
D
D
D
D
D
D
GULF
BARRIE
MEXICO


NTA
Ⓓ
R
C
H
335
475
100
15′
450
75
334
425

Produced by U.S. Fish and Wildlife
Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17: Universal Transverse Mercator
25,000-foot grid ticks based on Florida coordinate system, west zone

Overlay material compiled in 1983 from latest available data obtained from Federal, State and Local government agencies and other sources.

MAJOR SURFACE LANDFORMS

Western Highlands
Escambia Valley
Gulf Coastal Lowlands
Gulf Barrier Chain
Marianna Lowlands
New Hope Ridge
Greenhead Slope
Fountain Slope
Grand Ridge
Northern Highlands
Coastal Swamps
Brooksville Ridge
Western Valley

SOIL ASSOCIATIONS

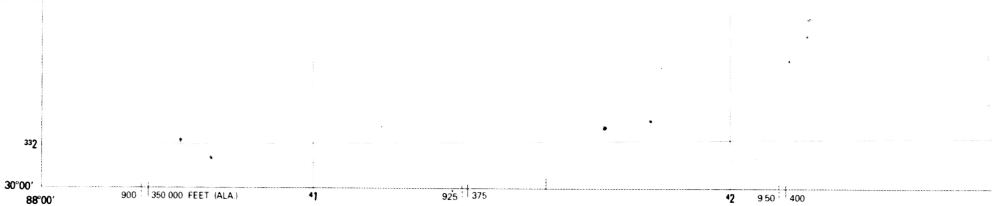
1. **Lakeland-Eustis-Lakewood Association**
2. **Lakeland, Ruston, and Norfolk-Sunsweet, Carnegie and Cuthbert Association**
3. **Red Bay-Blakely Association**
4. **Tifton-Carnegie-Faceville Association**
5. **Norfolk-Ruston-Savannah Association**
6. **Tifton-Irvington-Lynchburg Association**
7. **Klej-Leon Association**
8. **Huckabee-Kalmia-Izagota Association**
9. **Coastal Dune Land and Beach-Tidal Marsh Association**
10. **Plummer-Rutlege-Alluvial Land-Fresh Water Swamp-Dorovan-Pamlico Association**
11. **Lakeland-Paola-Kureb-St. Lucie-Rimini Association**
12. **Lakeland-Troup Association**
13. **Troup-Orangeburg Association**
14. **Dothan-Orangeburg Association**
15. **Red Bay-Lucy Association**
16. **Chipley-Scranton Association**

G U L F O F M E X I C O

1. Nahuak Hualon-Lonestar Association
2. Nahuak Hualon-Lonestar Association
3. Kitty Leah Association
4. Hedadsee-Kalma-Izagora Association
5. Coastal Dune Land and Beach Trail Marsh Association
6. Plummer-Refugio Alluvial Land-Fresh Water
7. Plummer-Refugio Alluvial Association
8. Lakeland Paola-Kendall-St. Lucie Reefal Association
9. Lakeland Troup Association
10. Troup-Orangeburg Association
11. Bethan-Orangeburg Association
12. Bethan Association
13. Chipley-Scranton Association
14. Johns Leaf Association
15. Tait Water Marsh and Swamp Complex Association
16. Troup-Lucy Creek Association
17. Bethan-Orangeburg Tifton Association
18. Lakeland-Faceville Association
19. Chipley-Albany-Leon Association
20. Lakeland-Albany-Orangeburg Association
21. Tifton-Faceville-Orangeville Association
22. Norfolk-Ruston-Goldsboro Association
23. Tifton-Faceville-Marlboro Association
24. Lakeland-Cuthbert-Dothana Association
25. Lakeland-Albany-Orangeburg Association
26. Goldsboro-Lynchburg-Rains Association
27. Kureb-Resota-Mandarin Association
28. Lakeland-Foxworth-Centenary Association
29. Lenfield-Albany-Dothan Association
30. Lakeland-Albany-Orangeburg Association
31. Portsburg-Leon-Refugio Association
32. Plummer-Pelham Association
33. Refugio-Kitchen-Pulaxey Association
34. Chipley-Albany-Dothan Association
35. Lakeland-Albany-Orangeburg-Dixie Association
36. Dothan-Blanton Association
37. Bethan-Dothan-Lucy Association
38. Dothan-Orangeburg Association
39. Lakeland-Albany-Orangeburg Association
40. Lenfield-Albany-Dothan Association
41. Dothan-Orangeburg-Red Bay Association
42. Alpin-Blanton-Eunola Association
43. Orangeburg-Lucy-Bethan Association
44. Chipley-Albany-Dothan Association
45. Lenfield-Albany-Dothan Association
46. Brevard, var. Wainman-Elbin Association
47. Meranes, var. Fields, Var. Capeland, Var. Association
48. Tait Water Marsh and Swamp Complex Association
49. Tait Water Marsh and Swamp-Coastal Dunes Association
50. Alpin-Blanton Association
51. Chipley-Blanton-Swamp Association
52. Adamsville, var. Chatfield-Blanton Association
53. Tait Water Marsh Association
54. Jamesville-Chatfield-Archer Association
55. Arredondo-Gainesville Association
56. Hernando-Archer-Chatfield Association
57. Izarr-Lochloosa-Tavares Association
58. Bethan-Orangeburg Association
59. Bushnell-Hokeana-Felda Association
60. Bichton-Flemington-Kanapaha Association
61. Leon-Muscotte-Surrency Association

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)

1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3


332
30°00′
88°00′
900
350 000 FEET (ALA.)
41
925
375
42
950
400

THE FLORIDA ECOLOGICAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES, NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS - 82/47) AND THE MINERALS MANAGEMENT SERVICE FOR COASTAL PLANNERS, DECISION MAKERS, AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS, AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES THE COASTAL COUNTIES: ESCAMBIA, SANTA ROSA, OKALOOSA, WALTON, WASHINGTON, BAY, CALHOUN, GULF, FRANKLIN, WAKULLA, JEFFERSON, TAYLOR, DIXIE, LEVY, CITRUS AND HERNANDO, AND EXTENDS OFFSHORE APPROXIMATELY 10 MILES. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION:

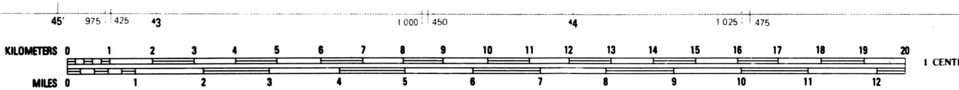
LANDFORMS: Physiographic Map of Florida,
State Bureau of Geology, 1980.

SOILS: General Soils Atlas of Florida,
Division of State Planning, 1975.
General Soils Atlas of Florida, U.S.
Soil Conservation Service, 1982.

ACTIVE DUNES: Black and White Aerial
Photography, 1:80,000 Scale, Mark Hurd
Aerial Surveys Inc., 1980.
Topographic Maps, 1:24,000 Scale, U.S.
Geological Survey, various dates.

GEOLOGIC FAULTS: Map of Escambia and
Santa Rosa Counties Showing Contours on top
of the Lower Limestone of the Floridan
Aquifer, State Bureau of Geology, 1965.

FOR COMPLETE REFERENCES SEE MAP NARRATIVE

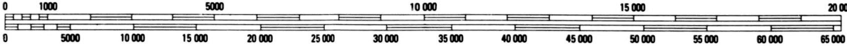

45′
975
425
⁴3
1 000
450
⁴4
1 025
475
KILOMETERS
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
1 CENTI
MILES
0
1
2
3
4
5
6
7
8
9
10
11
12

45 1 050 30′ 1 075 525 1 100 550 47 1 125 575 15′

SCALE 1:100 000

IMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND

CONTOUR INTERVAL 5 METERS


0
1000
5000
10 000
15 000
20 00
0
5000
10 000
15 000
20 000
25 000
30 000
35 000
40 000
45 000
50 000
55 000
60 000
65 000

1. **Lakeland-Eustis-Lakewood Association:** Nearly level to gently sloping, excessively drained soils, sandy throughout.

5. **Norfolk-Ruston-Savannah Association:** Nearly level to gently sloping, well drained or moderately well drained, loamy soils with loamy subsoils.

7. **Klej-Leon Association:** Nearly level, somewhat poorly drained sandy soils, sandy throughout or with weakly cemented sandy subsoil.

9. **Coastal-Dune Land and Beach-Tidal Marsh Association:** Nearly level, sandy soils and poorly drained soils subject to frequent flooding by tidal waters and gently sloping, sandy soils not subject to flooding by tidal waters.

10. **Plummer-Rutlege-Alluvial Land-Fresh Water Swamp-Dorovan-Pamlico Association:** Nearly level, poorly drained soils with a thick surface layer overlying a loamy subsoil and very poorly drained soils that are sandy throughout.

11. **Lakeland-Paola-Kureb-St. Lucie-Rimini Association:** Nearly level to steep, excessively drained soils, sandy throughout.

16. **Chipley-Scranton Association:** Nearly level to gently sloping, moderately well to somewhat poorly drained sandy soils.

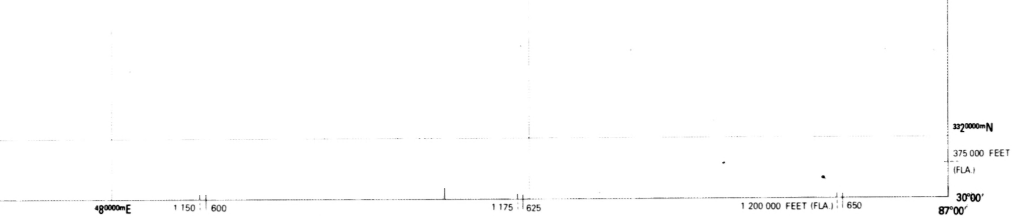
18. **Salt Water Marsh-Bayvi-Dirego Association:** Nearly level, very poorly drained soils subject to frequent flooding by tidal waters.

E=__ft/yr - - - - - - BEACH EROSION AREA (P
Univ. of West Florida, 1

A=__ft/yr —— BEACH ACCRETION AREA
Univ. of West Florida, 1

■ GULF BARRIER ISLAND

Ⓓ ACTIVE DUNE AREA


3320000mN
375 000 FEET
(FLA.)
30°00′
87°00′
480000mE
1 150
600
1 175
625
1 200 000 FEET (FLA.)
650

00 METERS

FEET

eriod of Record: 1957-1981;
981)

(Period of Record: 1957-1981;
981)

U
D

NORMAL FAULT
(Showing relative vertical movement, U, up, and D, down)

U
D

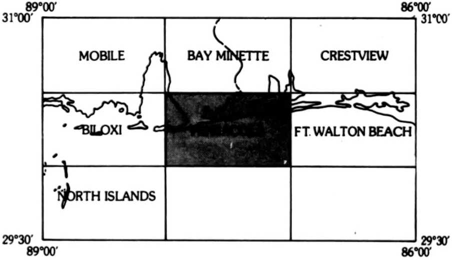
SUB-SURFACE NORMAL FAULT
(Showing relative vertical movement, U, up, and D, down)

STUDY AREA BOUNDARY

▮▮▮▮▮▮▮▮▮▮▮▮▮ Offshore

Inland (County)

Inland (State)


89°00′
31°00′
86°00′
31°00′
MOBILE
BAY MINETTE
CRESTVIEW
BILOXI
FT. WALTON BEACH
NORTH ISLANDS
29°30′
89°00′
29°30′
86°00′

54. Chipley-Blanton-Swamp Association
55. Adamsville, var.-Chiefland-Blanton Association
56. Candler-Apopka Association
57. Jonesville-Chiefland-Archer Association
58. Arredondo-Gainesville Association
59. Hernando-Archer-Chiefland Association
60. Sparr-Lochloosa-Tavares Association
61. Adamsville-Osier Association
62. Bushnell-Wabasso-Felda Association
63. Blichton-Flemington-Kanapaha Association
64. Leon-Mascotte-Surrency Association
65. Lynne-Pomona-Pompano Association
66. Candler-Paola-Tavares Association
67. Candler-Adamsville-Pompano Association
68. Arredondo-Kendrick Association
69. Broward-Boca Association
70. Panasoffkee-Bushnell Association
71. Myakka-Basinger Association
72. Meggett, var.-Pompano Association
73. Terra Ceia-Placid Association
74. Arredondo-Sparr-Kendrick Association
75. Candler-Lake Association
76. Masaryk Association
77. Nobleton-Blichton-Flemington Association
78. EauGallie-Wabasso-Basinger Association
79. Paisley-Floridana-Wabasso Association
80. Okeelanta-Aripeka-Terra Ceia Association
81. Homosassa-Weekiwachee-Lacoochee Association
82. Floridana-Basinger Association
83. Salt Water Marsh and Swamp Association
84. Fresh Water Swamp and Marsh Association
85. Blichton-Lochloosa-Kendrick Association
86. Paisley-Bushnell Association
87. Myakka-Pomello Association

MICROFILMED FROM
BEST AVAILABLE COPY

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)
2.5
2.2
2.0
1.8
1.6
2.8
3.2
3.6
4.0
4.5
5.0
5.6
1.0
1.1
1.25
1.4